

ABSTRACT

A chemotaxis assay procedure which is non-destructive of the cells being studied, which permits the ready performance of kinetic or time-dependent study of cell migration from the same sample, and which produces objective measurements includes the steps of: (a) labeling cells with a dye; (b) placing the labeled cells in a first chamber; (c) placing a chemical agent in a second chamber adjacent to said first chamber; (d) separating said first chamber from said second chamber with a radiation opaque membrane, said radiation opaque membrane having a plurality of substantially perpendicular transverse pores therein; (e) stimulating the labeled cells on the side of the membrane closest to said second chamber with electromagnetic radiation of a first wavelength whereby said labeled cells will emit electromagnetic radiation of a second wavelength; and (f) measuring the emitted electromagnetic radiation from the side of the radiation opaque membrane closest to the second chamber; wherein said radiation opaque membrane comprises a film which is not substantially transmissive to at least one of said first and second wavelengths of electromagnetic radiation. The radiation opaque membrane may comprise a dyed film or a film which has at least one radiation blocking layer applied thereto.

15 Claims. 7 Drawing Sheets

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